

**REMARKS**

The Office Action dated December 1, 2005 has been reviewed carefully and a Request for Continued Examination is being filed herewith with the present amendment.

Claims 38-45, 51, 52, and 54 are pending in the application.

Claims 1, 21-25, 26-37, 46-50, 53 and 55 have been cancelled herein.

Claims 2-20 were cancelled in a previous amendment.

**Objection to the Drawings**

Replacement sheets containing the corrected drawing figures for Fig. 4 and Fig. 6 as well as a marked-up copy of each replacement sheet are being submitted herewith for the approval of the Examiner.

**Claim Objections**

Claim 45 was objected to as being of improper dependent form. Claim 45 has been rewritten as an independent claim.

**Claim Rejections – 35 USC § 112**

Claims 38-45 and claims 51-54 were rejected under 35 USC § 112. The independent claims 38 and 51 have been amended herein to more closely track the language of the specification. The dependent claims have also been amended to address the Examiner's rejections.

### **Claim Rejections – 35 USC § 102**

With respect to this ground of rejection, it is noted that claim 1 has been cancelled. Claims 46 and 47 have been cancelled. Claim 51 has been rewritten to recite introduction of fuel and oxygen into the anode chamber to generate water and, therefore as Acker does not teach such introduction, the Acker patent cannot have anticipated claim 51.

Similarly, Colbow discusses a fuel cell operated in open circuit state such that the temperature of the stack increases as a result of methanol crossover. Colbow does not teach the steps E through G of amended claim 51 and, therefore, Colbow cannot have anticipated claim 51.

### **Claim Rejections 35 USC § 103**

Claims 38 and 39 were rejected under 35 USC § 103(a) as being unpatentable over Acker et al., United States Published Patent Application No. 2002/0122966 (“Acker”), in view of Hsu, United States Patent No. 6, 458,477 (“Hsu”).

Applicants respectfully urge that the Acker published application is disqualified under 35 U.S.C. § 103(c) as a reference under 35 U.S.C. § 103(a) against the instant application for a U.S. Patent. Acker and the present invention were, at the time the invention was made, owned by MTI MicroFuel Cells Inc. or subject to an obligation of assignment to MTI MicroFuel Cells Inc.

The statute 35 U.S.C. § 103(c) states as follows:

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

As noted, the statute indicates that prior art which qualifies only under one or more of subsections (e), (f), and (g) of section 102 shall not preclude patentability under § 103(c) where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. 35 U.S.C. § 102 provides as follows:

A person shall be entitled to a patent unless—

Section 102(a) “the invention...was patented...in this...country...before the invention thereof by the applicant.”

Acker does not qualify as prior art under 102(a) because the instant patent application was filed on March 6, 2002, which was before the Acker publication date of September 5, 2002. Applicants’ invention date, which is at least as early as his filing date, precedes the publication date of Acker’s patent application.

Section 102(b) provides “the invention was patented...more than one year prior to the date of the application for patent in the United States”.

Acker does not qualify as prior art under 102(b) because the instant application was filed before the patenting of Acker, as noted previously.

Section 102(c) precludes patentability when one has “abandoned the invention.”

Acker does not qualify as prior art under Section 102(c) because Applicants have not abandoned the present invention.

Section 102(d) precludes patentability when “the invention was first patented or caused to be patented...in a foreign country prior to the date of the application for patent in this country on an application for patent...filed more than 12 months before the filing of the application in the United States.”

Acker does not qualify as prior art under Section 102(d) because the present application was not filed in a foreign country before filing in the United States.

Accordingly, Applicants respectfully urge that the Acker reference qualifies as prior art only under 35 U.S.C. § 102(e), 102(f) or 102(g) and therefore is disqualified from serving as a reference under 35 U.S.C. § 103(a) by operation of 35 U.S.C. § 103(c).

With respect to claims 38 and 39, Applicants respectfully submit that the Examiner has relied upon Acker as the primary reference in rejecting those claims. It is believed that Acker has been disqualified pursuant to 35 U.S.C. § 103(c), as set forth above. Furthermore, as indicated by the Examiner, Hsu teaches that those of ordinary skill in the art will readily recognize the passive or active control systems, such as valves, can be employed to control the amount of fuel or air introduced to the fuel cell stack. The Hsu reference does not discuss generating water in the anode chamber and as such, does not alone render obvious Applicant's claims 38 and 39 as amended herein.

Claims 38-42 were rejected Under 35 USC 103(a) as being unpatentable over United States Patent No. 6,566,003 to Acker (“Acker patent”), in view of the JPO English Abstract for JP56/114284 and the Hsu reference.

Applicants respectfully urge that the Acker patent is disqualified under 35 U.S.C. § 103(c) as a reference under 35 U.S.C. § 103(a) against the instant application for a U.S. Patent. The Acker patent and the present invention were, at the time the invention was made, owned by MTI MicroFuel Cells Inc. or subject to an obligation of assignment to MTI MicroFuel Cells Inc.

The statute 35 U.S.C. § 103(c) states as follows:

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

As noted, the statute indicates that prior art which qualifies only under one or more of subsections (e), (f), and (g) of section 102 shall not preclude patentability under § 103(c) where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. 35 U.S.C. § 102 provides as follows:

A person shall be entitled to a patent unless—

Section 102(a) “the invention...was patented...in this...country...before the invention thereof by the applicant.”

The Acker patent does not qualify as prior art under 102(a) because the instant patent application was filed on March 6, 2002, which was before the original publication date of the patent application (October 24, 2002) and before the subsequent patenting of the Acker patent on May 20, 2003. Applicants' invention date, which is at least as early as his filing date, precedes the publication date of Acker's patent.

Section 102(b) provides "the invention was patented...more than one year prior to the date of the application for patent in the United States".

The Acker patent does not qualify as prior art under 102(b) because the instant application was filed before the patenting of Acker, as noted previously.

Section 102(c) precludes patentability when one has "abandoned the invention."

The Acker patent does not qualify as prior art under Section 102(c) because Applicants have not abandoned the present invention.

Section 102(d) precludes patentability when "the invention was first patented or caused to be patented...in a foreign country prior to the date of the application for patent in this country on an application for patent...filed more than 12 months before the filing of the application in the United States."

The Acker patent does not qualify as prior art under Section 102(d) because the present application was not filed in a foreign country before filing in the United States.

Accordingly, Applicants respectfully urge that the Acker patent qualifies as prior art only under 35 U.S.C. § 102(e), 102(f) or 102(g) and therefore is disqualified from serving as a reference under 35 U.S.C. § 103(a) by operation of 35 U.S.C. § 103(c).

With respect to claims 38-42, it is believed that Acker has been disqualified pursuant to 35 U.S.C. § 103(c), as set forth above.

As noted by the Examiner, the JPO English abstract is describing air being supplied from a blower through an air path into an air chamber during start of the fuel supply pump, as driven by a bypath valve, which is open to supply fuel added with air to the surface of the fuel electrode to shorten warming up time of the fuel cell. Applicant's claims 38-54 are not directed to warming up a fuel cell.

Hsu teaches that those ordinary skilled in the art will recognize that passive or active control systems such as valves can be employed to control the amount of fuel or air introduced into a fuel cell stack. The combination of Hsu and the Japanese reference do not disclose, teach or render obvious Applicant's invention as claimed in claim 38-42 because neither reference teaches supply of air and fuel to the anode chamber in order that the apparatus can generate water in addition to electricity or only to generate water, as in various embodiments of the present invention.

The Acker patent has been disqualified as a reference, and the combination of Hsu and the JPO Abstract do not render Applicant's invention obvious. Accordingly, it is respectfully submitted that amended claims 38-42 are patentable over the cited references.

### **Response to Arguments**

Applicant has cancelled claim 1. Applicant has amended independent claim 38 to indicate that the fuel and air are introduced into the anode chamber which recital the Ex-

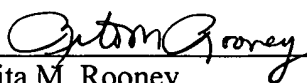
aminer indicated as being lacking. Applicant would like to point out that the prior assertions that "fuel does not have to cross over the membrane", indicated that the present invention does not require fuel crossover in order to generate water (because the water can be generated in the anode chamber). Nevertheless, the claims to that subject matter have been amended to clarify this aspect of the invention.

A Request for Continued Examination is being filed herewith and the present amendment addresses all of the objections and rejections that were raised in the Office Action dated December 1, 2005 with respect to the remaining claims and the drawings. Therefore, it is respectfully submitted that the application is now in condition for allowance.

Please do not hesitate to contact the undersigned in order to advance the prosecution of this application in any respect.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

  
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## REPLACEMENT SHEET

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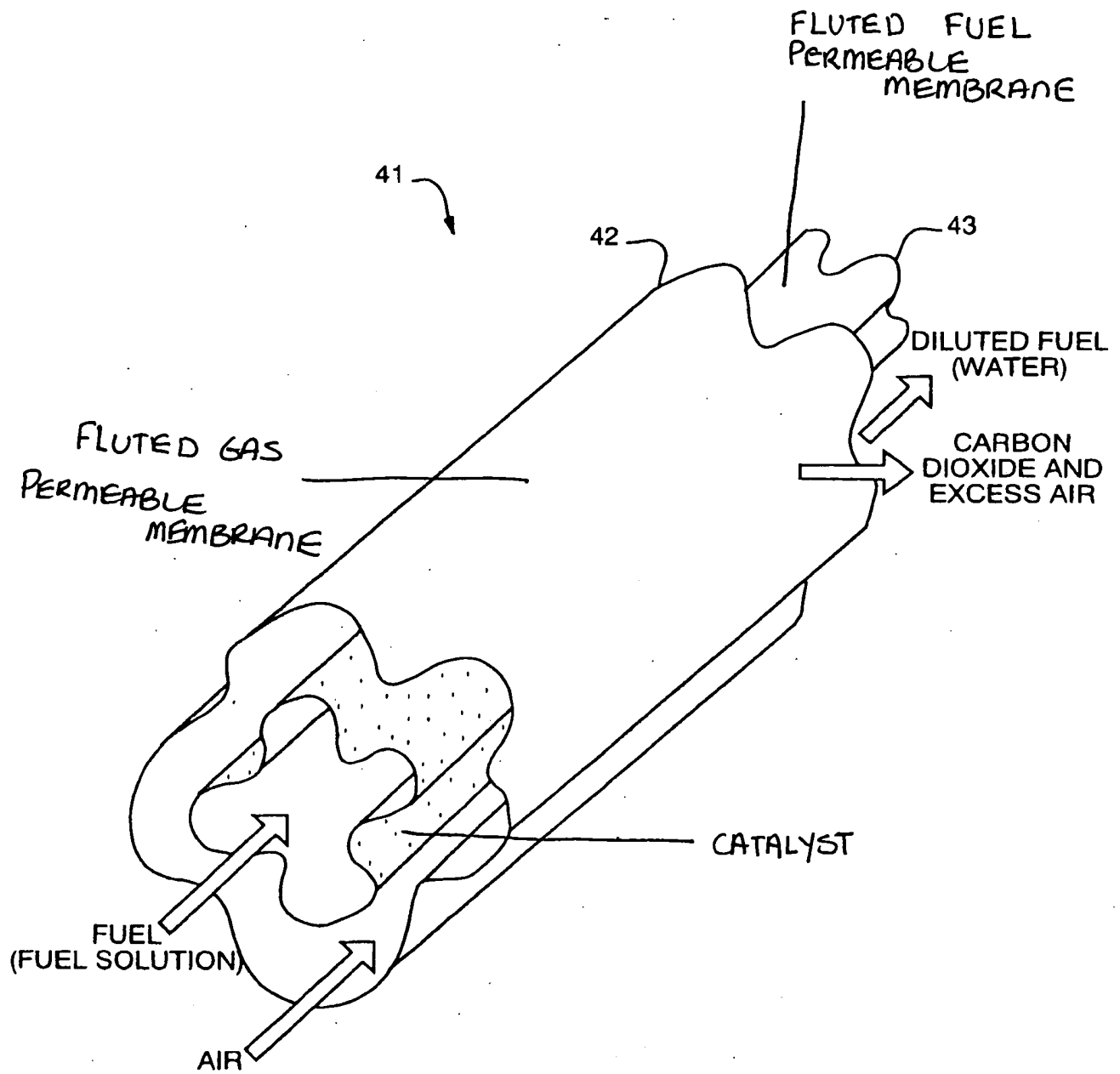


FIG. 4

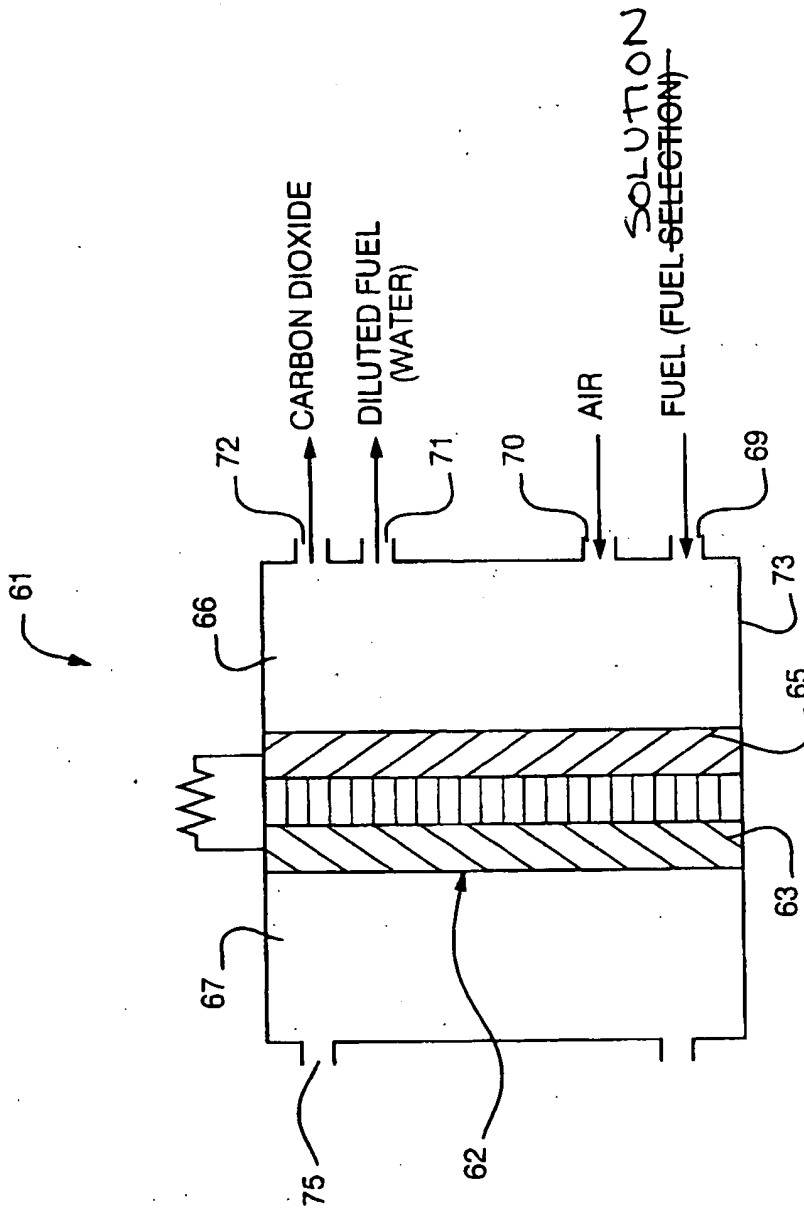


FIG. 6